Jeffry Brueggeman
General Attorney

SBC Communications Inc.
1401 I Street, NW
Suite 400
Washington, D.C. 20005
Phone 202-326-8911
Fax 202-408-8745
Email: jbruegg@corp.sbc.com

May 29, 2003

Via Electronic Submission

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW – Lobby Level
Washington, D.C. 20554

Re: Notice of Ex Parte Statement
CC Docket No. 01-337

Dear Ms. Dortch:

On Wednesday, May 28, 2003 SBC Telecommunications, Inc. (SBC) met with Commission staff in four separate meetings to discuss the material contained in the attached presentation. The SBC representatives attending all four meetings were: Dorothy Attwood, SVP-Federal Regulatory, Ed Cholerton, VP-Product Management- Internet, Mark Fishler, VP Product Management-Data Networking, James K. Smith, Executive Director-Federal Regulatory, Gary Phillips, General Attorney and Assistant General Counsel, and Jeffrey Brueggeman, General Attorney. Meetings were held with Chris Libertelli, Legal Advisor, Office of Chairman Powell, Matt Brill, Senior Legal Advisor, Office of Commissioner Abernathy, selected staff of the Office of Strategic Planning and Policy Analysis (Robert Pepper, Simon Wilkie, Scott Marcus, Don Stockdale), and selected staff of the Wireline Competition Bureau (Jeff Carlisle, Brent Olson, Ben Childers, Terry Natoli, Cathy Carpino, Michael Carowitz, Kimberly Cook, Bill Kehoe).

One electronic copy of this Notice is being submitted to the Secretary of the FCC in accordance with Section 1.1206 *et. seq.* of the Commission's Rules. Additionally, an electronic copy is being submitted to the Commission's Duplication Contractor, Qualex International.

Should you have any questions, please do not hesitate to contact me.

Sincerely,
/s/ Jeffry A. Brueggeman

Attachment
Cc: C. Libertelli, S. Wilkie, J. Carlisle, T. Natoli, K. Cook, M. Brill, S. Marcus, B. Olson, C. Carpino, B. Kehoe, R. Pepper, D. Stockdale, B. Childers, M. Carowitz

Medium/Large Business and Mass Market Broadband Overview

May 28, 2003

Broadband Market Definition

- Commission has held that broadband is a discrete market, but hasn't clearly defined the scope of the market
- The market for broadband services include:
  - All packet-based services
  - High-capacity (DS1 and above) services that are not circuit switched
- These services offer similar functionality and are substitutes for each other
- There are two broadband product markets – medium/large business and mass market (residential and small business)

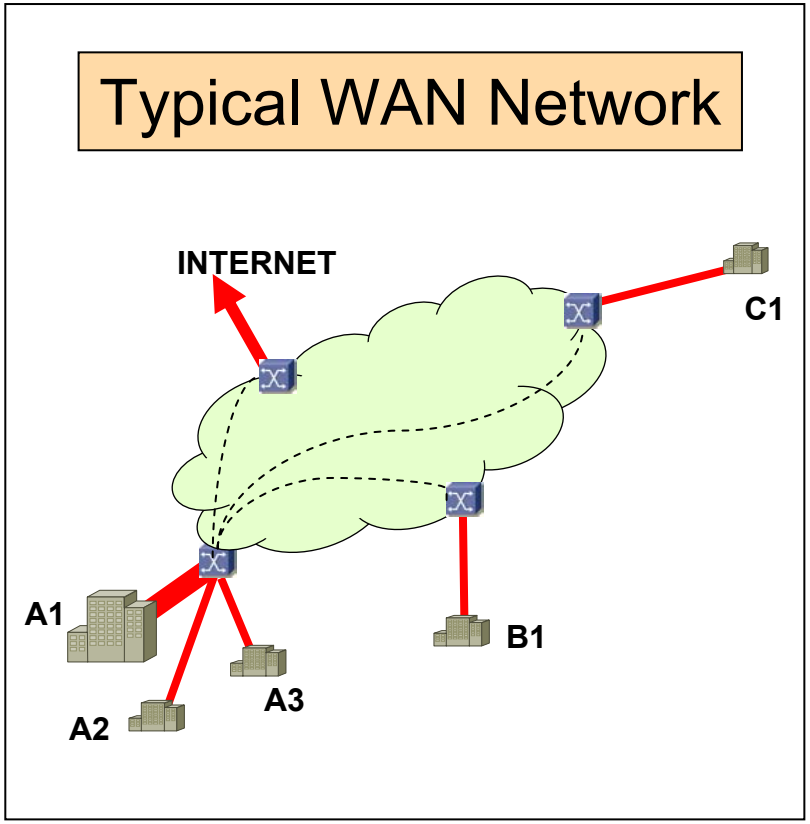
Broadband Scope of Relief

- SBC doesn't seek relief for all broadband services – traditional special access services carved out per NPRM
- SBC's requested relief is targeted and well defined:
  - Packet based services and very high-capacity optical services (155 Mbps and higher) that are not circuit switched
- Commission should classify ILECs as non-dominant in the provision of:
  - DSL and successor technologies for mass market customers
  - ATM, Frame Relay, Ethernet and optical services that are not circuit switched for medium and large businesses.
- As with AT&T non-dominant classification, Commission should forbear from all dominant carrier regulation, including:
  - Tariff regulation; *Computer III* ONA and CEI requirements

Overview of Medium/Large Business Market

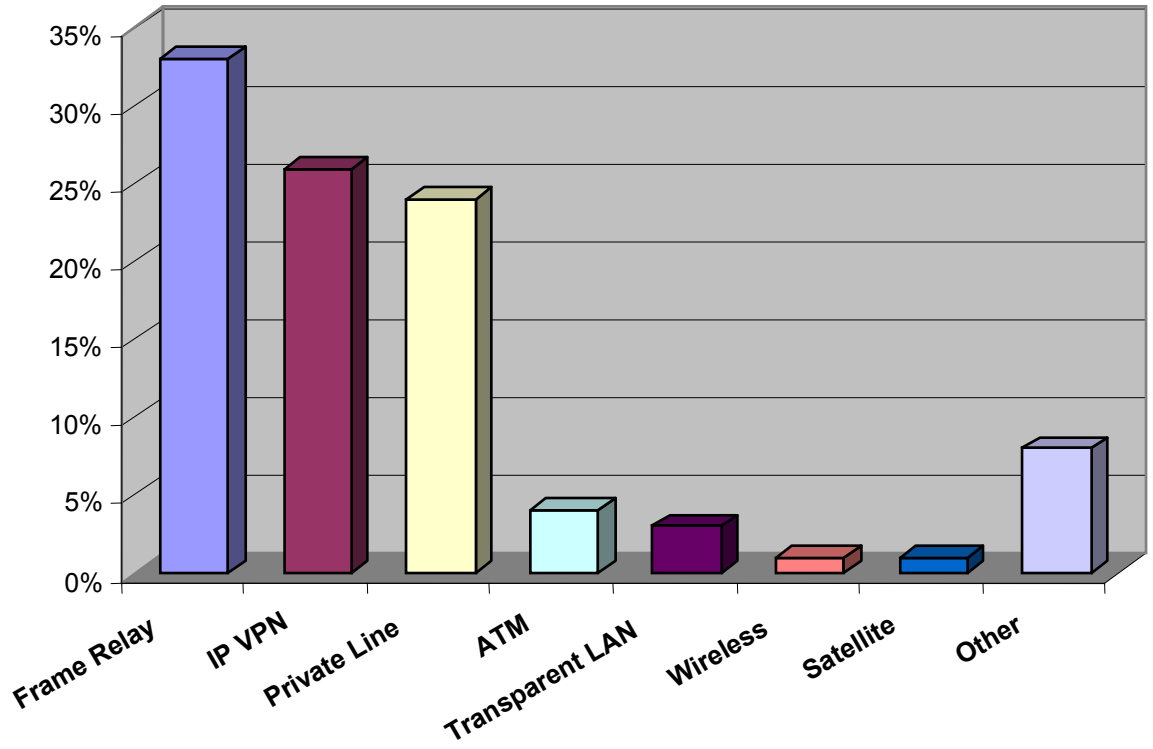
Businesses Use Broadband to Create Wide-Area Networks (WANs)

WANs employ a combination of broadband transmission technologies to provide businesses and enterprises with high-speed voice, data and video transmission between multiple locations, as well as interconnection of those locations to the Internet



Options for Wide-Area Networking

Percentage of technologies used for Primary WAN Platform



Some businesses also install Secondary WANs for back-up and disaster recovery:

Percentage of technologies used for Secondary WAN Platform:

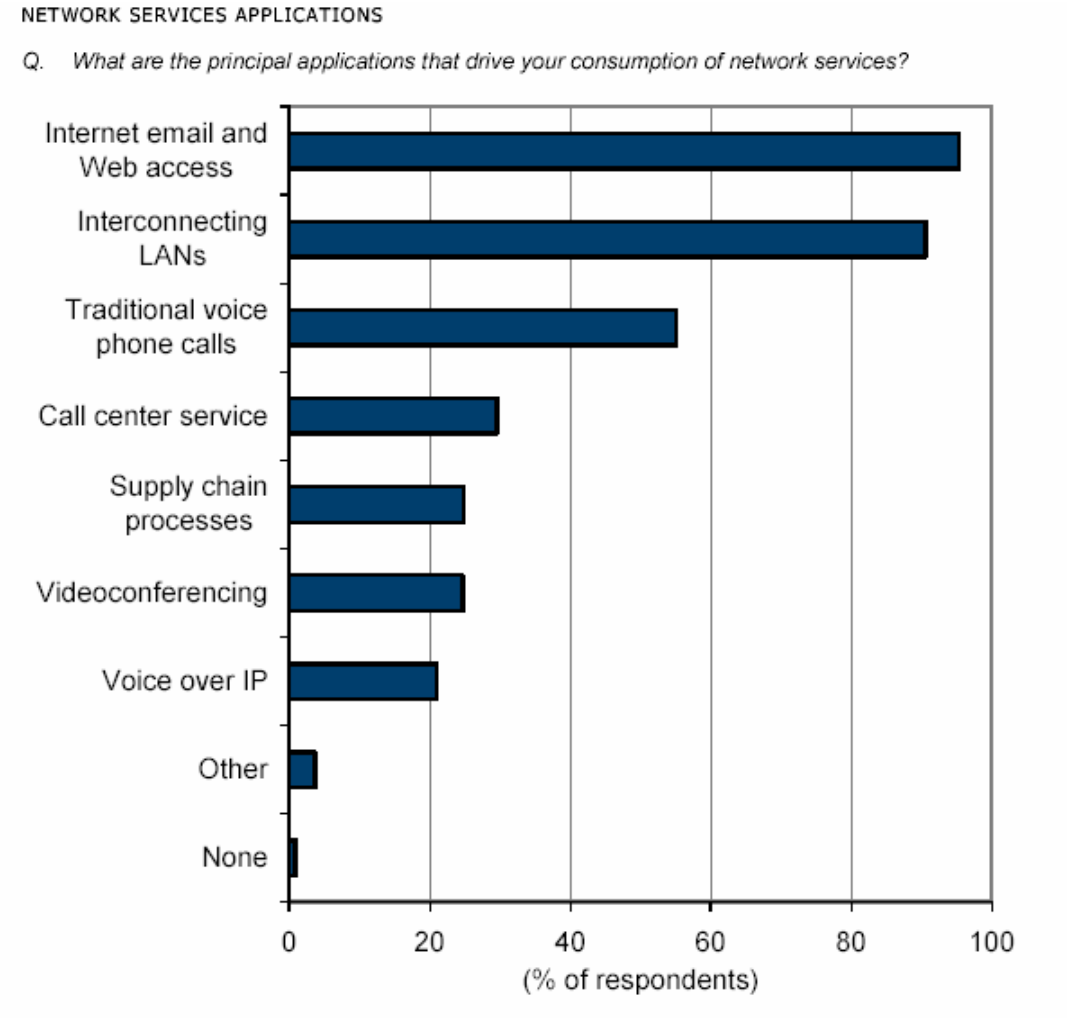
- IP VPN 26%
- Frame Relay 16%
- Private Lines 13%
- Ethernet 11%
- ATM 8%
- Satellite 1%
- No Secondary WAN 32%

Source: 2002 WAN Manager Survey; IDC; November 2002

Enterprise Businesses have multiple options for Primary and Secondary Wide-Area Networks

- As Wi-Fi Technology evolves, Wireless will significantly increase market share
- These competing services are subject to different regulatory treatment

WANs: Substitutable Services Used for Similar Applications



Source: 2002 WAN Manager Survey; IDC; November 2002

- 90% use WANs for Email, Web access and LAN Interconnection, regardless of company size, geography or industry
- Only 5% of WAN users do not provide Internet access to their employees.
- Use of WANs to support e-Business Web Access, including Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), and HR applications, is significantly increasing

Emerging Trends: Competition, Convergence, and Customization

Last Mile Alternatives

- Internetworking between technologies allows "Last Mile" Local Access to be provided by new and emerging solutions
- Current Services:
  Frame, ATM, DSL, Private Line, Dial-up
- Emerging & New Access Technologies:
  Wi-Fi, g.SHDSL, Ethernet over Copper
- Multiple Options from Multiple Providers (ILEC, IXC, CLEC, Fixed Wireless, BLEC, DLEC)

Backbone Convergence

- Multi-Protocol Label Switching (MPLS) is an emerging technology which allows Packet and IP data to co-exist on the same network with Quality of Service (QoS)
- MPLS-enabled backbone permits a single location to have connectivity to all other locations
- Convergence of existing Layer 2 (Frame/ATM) and Layer 3 (IP-VPN) WAN backbones

Voice and Data Convergence

- 32% currently integrate Voice and Data onto WANs
- Voice and Data converged WANs are projected to grow to 44% within next 12 months

Customer Network Management

- Proactive Customer Network Management
- Trouble ticket submission, PVC reconfiguration
- End-to-end network visibility
- Enhanced Quality of Service (QoS) and improved Service Level Agreements (SLAs)

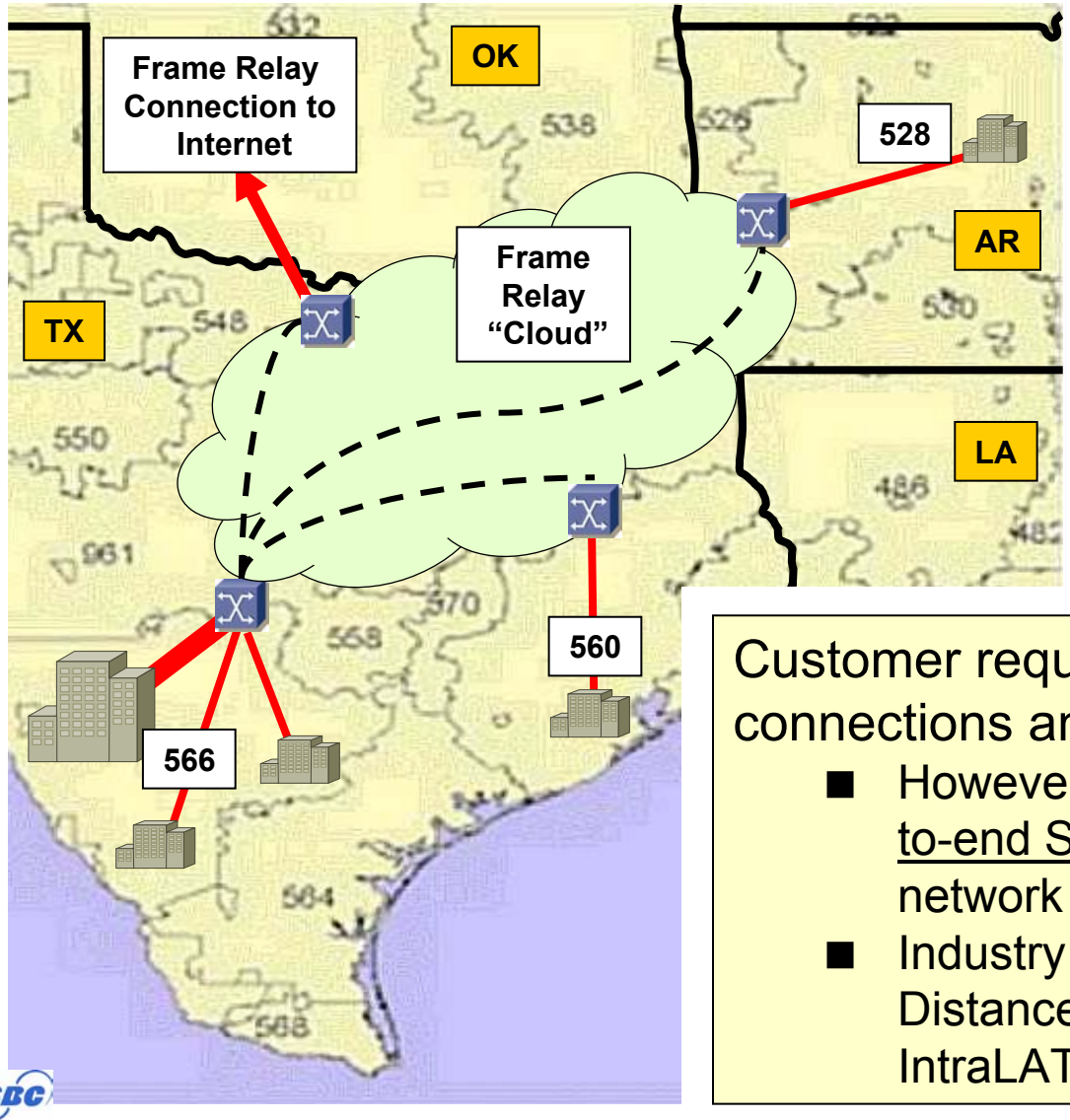
Source: 2002 WAN Manager Survey; IDC; November 2002

Continued…

- Businesses are converging existing WANs and building new customized hybrid WAN networks using multiple technologies
  - Private Line users are implementing hybrid customized networks, including Frame Relay, ATM, Ethernet, and IP VPN
  - Frame Relay users are implementing hybrid customized networks, including ATM, IP VPN, and Ethernet
- Product lines are also converging
  - IP-Enabled Frame Relay integrates traditional Frame Relay functionality with advanced IP capability
  - 58% of Frame Relay users either use or plan to use IP-Enabled Frame Relay within the next 12 months
    (Source: 2002 WAN Manager Survey; IDC; November 2002)
- Businesses no longer view the WAN market as “siloed” solutions.
  - Market views multiple technologies as “piece-part” components which allow for the building of customized solutions

Frame Relay and ATM Market Overview

Typical Mid-Size Customer Interstate Frame Relay Network



Customer Building a Wide-Area Network to support five Locations:

- Headquarters in San Antonio LATA 566
- Two Remote Offices in San Antonio "Local" LATA 566
- One Remote Office in Houston - LATA 560
- One Remote Office in Little Rock - LATA 528
- Connection to Internet

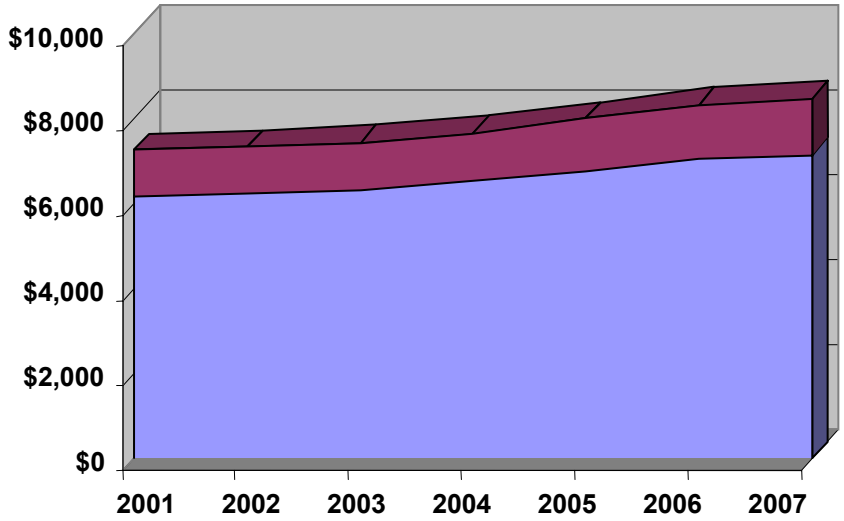
Customer requires both IntraLATA connections and InterLATA connections

- However, Customer will choose one end-to-end Service Provider for the entire network
- Industry tracks this network as "Long Distance" due to the combination of IntraLATA and InterLATA components

Frame Relay and ATM Services are Primarily Interstate

US Frame Relay Market ($M)

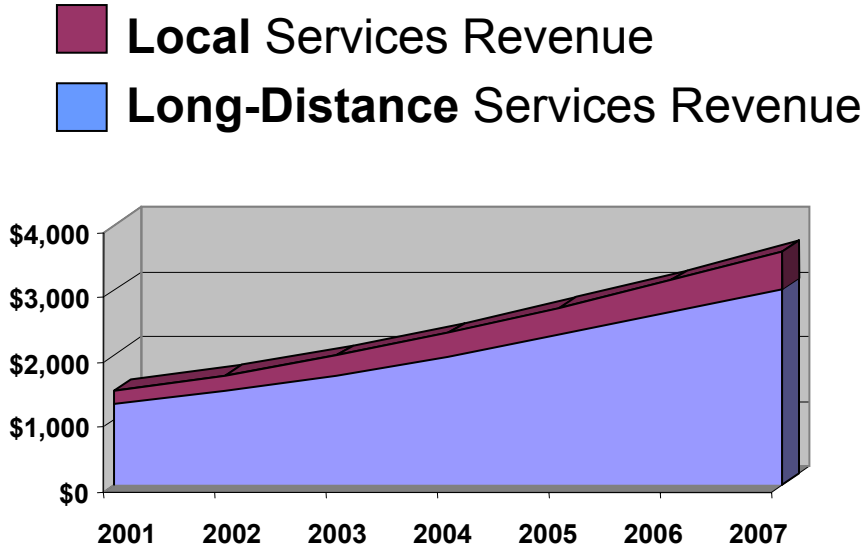
- 2002 - 2007 CAGR: 2.9%



	2001	2002	2003	2004	2005	2006	2007
	$1,083	$1,104	$1,126	$1,172	$1,230	$1,291	$1,317
	$6,189	$6,252	$6,314	$6,503	$6,763	$7,034	$7,155
	$7,272	**$7,356**	**$7,440**	**$7,675**	**$7,993**	**$8,325**	**$8,472**

US ATM Market ($M)

- 2002-2007 CAGR: 16.3%



	2001	2002	2003	2004	2005	2006	2007
	$213	$254	$304	$362	$423	$493	$577
	$1,234	$1,434	$1,681	$1,970	$2,301	$2,657	$3,014
	$1,447	$1,687	$1,984	$2,332	$2,724	$3,150	$3,591

Source: U.S. Frame Relay and ATM Services Forecast, 2002-2007; IDC; February 2003

85% of the entire $9.4B Frame Relay and ATM Market in 2003 is made up of Long-Distance Frame Relay and ATM revenue

Incumbent IXCs Dominate

2001 Frame Relay and ATM (combined) Market Share by Revenue				
	Long Distance Revenue ($M)	Local Revenue ($M)	Total Revenue ($M)	Market Share
MCI/Worldcom	$2,850	$29	$2,879	33.0%
AT&T	$2,640	$34	$2,674	30.7%
Sprint	$740	$25	$765	8.8%
Qwest	$30	$228	$258	3.0%
SBC		**$376**	**$376**	**4.3%**
Bell South		$274	$274	3.1%
Verizon		$310	$310	3.6%
Intermedia	$190	$13	$203	2.3%
Equant	$350		$350	4.0%
Infonet	$240		$240	2.8%
Other	$380	$13	$393	4.5%
TOTAL	**$7,420**	**$1,302**	**$8,722**	

Source: U.S. Frame Relay and ATM Services Forecast, 2001-2006; IDC; June 2002

- MCI/ Worldcom and AT&T **dominate** the U.S. Frame Relay and ATM market with 64% of the total market share
  - Significant portion of the revenues for the Long-Distance market consists of both InterLATA and IntraLATA circuits
  - Verizon, Bell South, and SBC's combined share of Long-Distance Frame Relay and ATM Revenue in 2003 projected to only be between 1% to 3%

Why Incumbent IXCs Dominate

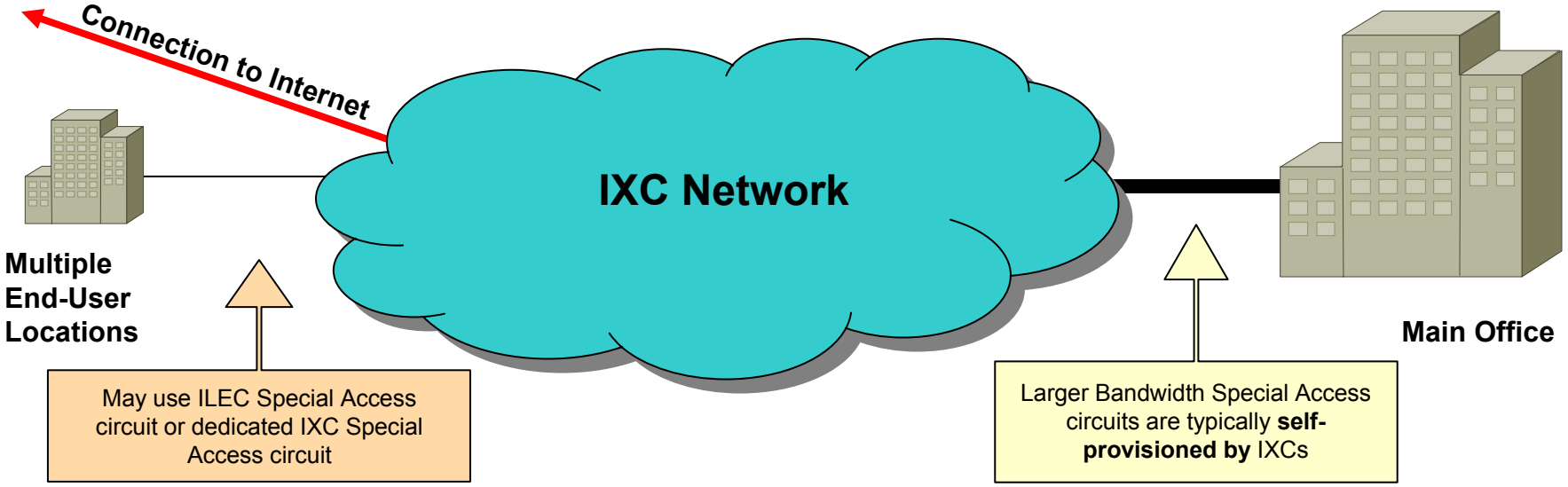
- Customers prefer single provider for "all distance" broadband needs

  "Let's face it, most networks have a significant need for both intraLATA and interLATA connections……..The carrier who can provide one-stop shopping for these services has an obvious strategic advantage."

  Network World, Steve Taylor - Consultant and Broadband Packet Evangelist and Joanie Wexler - Independent Networking Technology Editor and Writer

- Interstate market predominantly served by IXC end-to-end services
  - "Big Three" IXCs do not use ILEC Frame Relay and ATM services as wholesale inputs
  - "Big Three" IXCs generally refuse to interface with ILEC Frame Relay and ATM networks
  - Increasing trend is for IXCs to provide their own access facilities

Interstate ATM and Frame Relay Service Arrangements



ILEC Obstacles in Competing for Nationwide Data Services

- IXCs have greater Nationwide Footprint
  - AT&T: 610 POPs
  - MCI/Worldcom: 544 POPs
  - SBC: 303 POPs

- "End-to-end" visibility within the customer's network is not easily supportable when another service provider's Frame Relay and ATM network is used
  - Impacts the ability to effectively manage the customer's network

  "With our integrated networking solutions, businesses no longer have to patch together disparate services from multiple providers."

  (Barbara Peda, Senior VP of Product Management and Product Marketing, AT&T Business, 4/16/03)

- Operation, Installation, and Maintenance (OI&M) restrictions inhibit ability to compete in this market
  - Separate Subsidiaries required:
    - InterLATA Transport Provider (SBC Long Distance)
    - IntraLATA Transport Provider (SBC Advanced Services Inc)
  - One affiliate can't have visibility into the other's network

- Dominant carrier regulation, including tariffs, restricts ILEC's ability to meet customer demand for customized broadband solutions

IP-VPN Market Overview

U.S. IP VPN Market in 2003

- IP VPNs can be competitively provisioned as a carrier network solution or a CPE-based solution combined with transport facilities
  - IP VPN services today are primarily CPE-based solutions
- Carrier managed networks include IXCs, RBOCs, CLECs, and Wholesale ISPs
  - As with Frame Relay and ATM, the vast majority of VPNs include InterLATA and IntraLATA circuits
- IP VPN allows other protocols (such as Frame Relay, ATM, Ethernet, and DSL) to both be transported across the IP network and to interconnect as local access at each customer location
  - Each VPN solution is customized to meet individual customer requirements

Current environment impacts the ILEC's ability to effectively implement network-based customized solutions in the IP VPN market

US Market for IP VPN Services

IP VPN Market By Provider Type

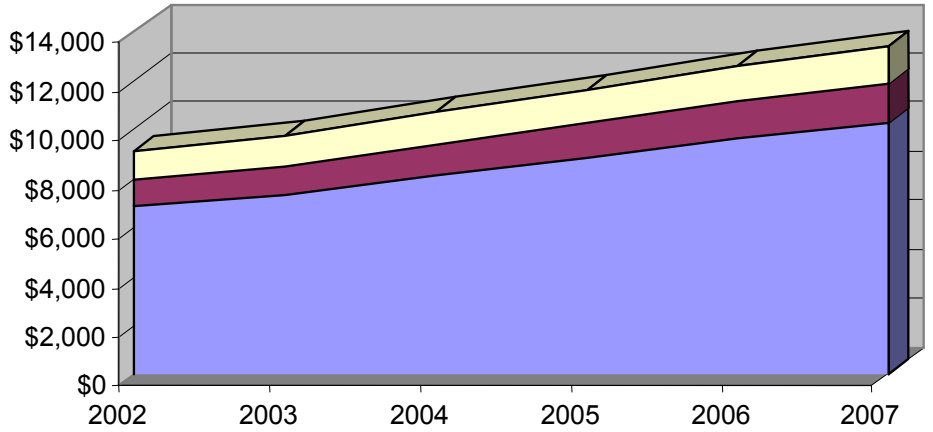
Carrier Managed IP VPN
Carrier manages all aspects of the IP VPN service

Hybrid IP VPN
End-user and carrier share responsibility for implementing and managing an IP VPN service. End user typically manages adds, moves and changes

Do-It-Yourself (D-I-Y) IP VPN
End-user implements and manages an IP VPN service using its own leased or purchased transport facilities and equipment without the aid of a carrier or outsourcing entity

US IP VPN Market ($M)

■ 2002-2007 CAGR: 8.0%

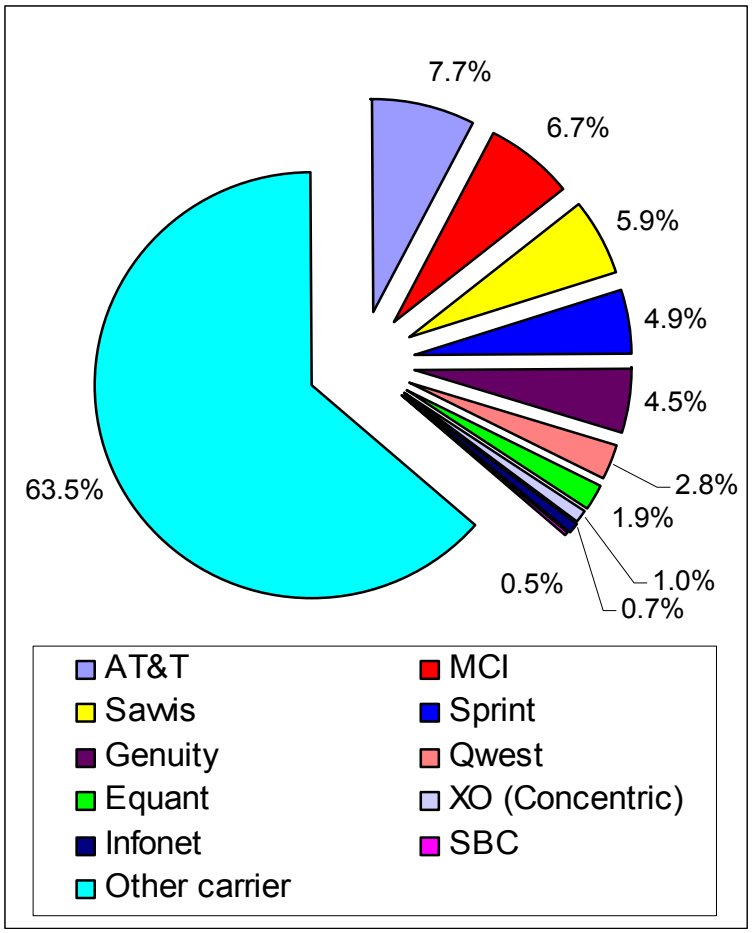


	2002	2003	2004	2005	2006	2007
	$1,168	$1,195	$1,281	$1,364	$1,457	$1,538
	$1,086	$1,157	$1,256	$1,366	$1,484	$1,577
	$2,254	$2,352	$2,537	$2,730	$2,941	$3,115
	$6,847	$7,351	$8,129	$8,858	$9,627	$10,283
	$9,101	$9,703	$10,666	$11,588	$12,568	$13,398

Source: U.S. IP VPN Services Forecast, 2002-2007; IDC; December 2002

D-I-Y, which accounts for 3/4s of the IP VPN Market is a completely customized network solution

Estimated IP VPN Share by Service Provider



- Carrier managed IP VPN represents only 25% of the U.S. IP VPN Market
- Among carriers, the market is highly fragmented among many players
- The incumbent IXCs are emerging as market leaders because of their greater flexibility to assemble customized VPN solutions

Source: IP VPN Market Shares and Competitive Analysis; March 2003

2002 Total Carrier IP VPN Services Market Size = $2.3B

Ethernet Market Overview

Ethernet Competitive Market

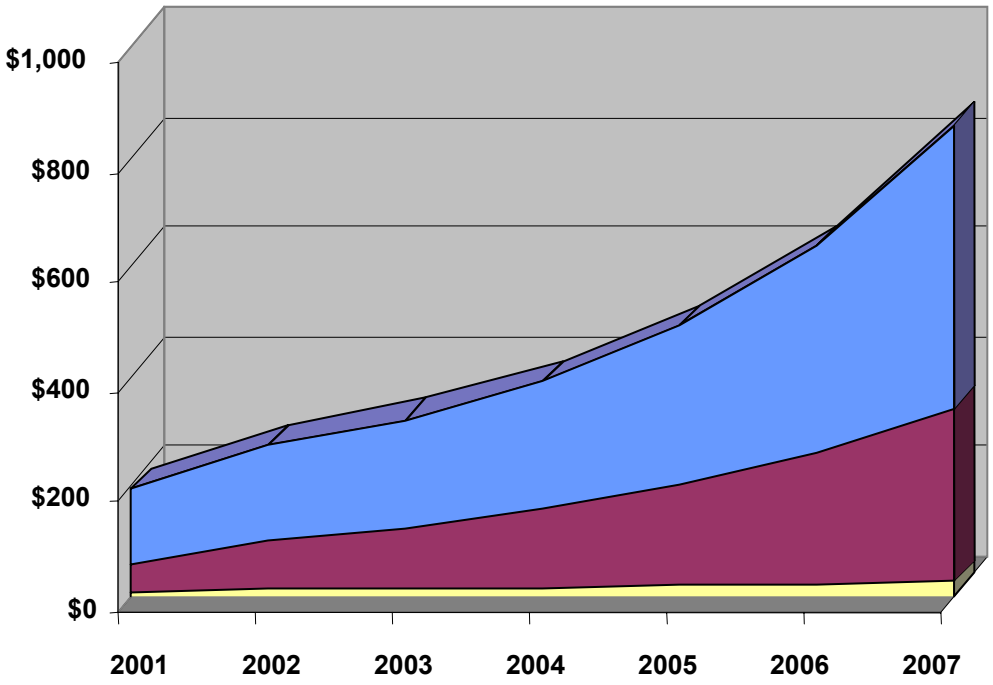
- Competitors offer Ethernet solutions using very different technologies
  - Ethernet over SONET and Resilient Packet Ring (RPR)
    - MCI, AT&T, Cox Communications, US Signal, Time Warner
  - Switched Ethernet
    - Charter, TDS, Yipes, Telsion/On-Fiber,Time Warner, Utilicorp, Comcast, Cogent
  - Wavelength/Dedicated Fiber
    - Time Warner, Charter, TDS, Telsion/On-Fiber, Utilicorp, AT&T, Williams, Broadwing
  - Dark Fiber & CPE
    - Customer acquires own fiber and builds private network; supported by equipment vendors

Tariff regulation will limit the ability to provide customized Ethernet network solutions

U.S. Market for Ethernet Services

US IP Ethernet Market ($M)

- 2002-2007 CAGR: 25.9%



	2001	2002	2003	2004	2005	2006	2007
	$134.0	$170.9	$197.2	$234.6	$291.1	$377.5	$516.6
	$48.2	$91.6	$112.6	$141.9	$182.2	$237.9	$315.7
	$8.0	$8.4	$10.1	$12.5	$15.4	$19.5	$24.7
	$190.2	**$270.9**	**$319.9**	**$389.0**	**$488.7**	**$634.9**	**$857.0**

Source: U.S. Metro Ethernet Services Forecast, 2002-2007; IDC; December 2002

Transparent LAN
Used to Interconnect Enterprise LANs within the metro and to a lesser degree, across the long-haul

Internet Access
Used by Enterprises and ISPs to Access the Internet

Wholesale Transport
Used by Resellers to package and sell value-added services

While Ethernet is a viable WAN solution for the metro, Frame Relay, ATM and VPN will continue to capture the majority of the market for building customized WAN solutions

Summary of Current Large Business Market

- Due to advances in technology, product lines are converging
- Enterprise Businesses have multiple options, from multiple service providers, for implementing WANs
  - Business will use any “service provider” to select the solution that best meets their business needs and provides the most flexibility for future growth
- Businesses are converging existing WANs and building new customized hybrid WAN networks using multiple technologies
  - IP VPNs represent the ultimate convergence of multiple product technologies
- Businesses no longer view the WAN market as “siloed” solutions.

Market is demanding integrated, hybrid networks with customized solutions

Mass Market
Broadband Overview

Mass Market Broadband Overview

- Mass Market Broadband refers to the means by which residences and small businesses gain high-speed access to the Internet.
- For residential customers, two product alternatives are generally available: DSL and Cable Modem. Other alternatives, such as Satellite or Fixed Wireless have insignificant market share (<2%) at this time.
- For small business customers (generally defined as businesses that have no more than 40 employees), a slightly wider range of product alternatives is generally available. While DSL and Cable Modem predominate, T-1's, ISDN, Satellite and Fixed Wireless command about 7% market share in total.

Mass Market Broadband

Product Applications

- From a Product Application perspective, Residence & Small Business market segments are essentially the same.
- According to a 1Q03 study done by TMNG, three of the top four product applications are common to Residential and Business customers:
  - More than 90% use Broadband for e-mail communication
  - More than ¾ use Broadband for sending/receiving data
  - More than 70% use Broadband for general browsing

Mass Market Broadband
Product Availability

Within SBC's franchise area, DSL is available to 67% of all residential and business locations. By contrast, we estimate that Cable Modem service is available to 79% of all residences and businesses. Further estimates, based on an EOY '02 study by Claritas, indicate the following:

- Nearly 60% of all customers in SBC's franchise areas have access to both DSL and Cable Modem
- Nearly 20% of customers have access to Cable Modem, but not DSL
- Less than 10% of customers have access to DSL, but not Cable Modem
- Slightly more than 10% of customers have no access to broadband

Mass Market Broadband

Market Share Trends - Nationwide

A report released May 16th, 2003 by Leichtman Research Group indicated that:

- Cable Modem continues to be the market leader with nearly 65% market share, while DSL has 35%;
- Cable Modem had 12.3M subscribers as of Mar 31st, 2003, while DSL had only 6.8M subscribers;
- Broadband net subscriber adds for 1Q03 were 1.877M of which 1.226M (65%) were Cable Modem and 651k (35%) were DSL.

Mass Market Broadband

Summary Statistics for SBC

- 32M total DSL-capable residential & business locations
  - 27.5M residential (86% of total)
  - 4.5M business (14% of total)
- 2.6M total DSL subscribers
  - 2.15M residential
    (85% Affiliated ISP; 15% Non-affiliated ISP)
  - 450k business
- 8.1% total product penetration
  - 7.8% residential
  - 10.0% business

Mass Market Broadband

SBC Internal Market Share Study Results

- SBC's internal studies reflect trends in 17 metropolitan areas (across 12 states) which encompass more than 80% of the total franchise population.

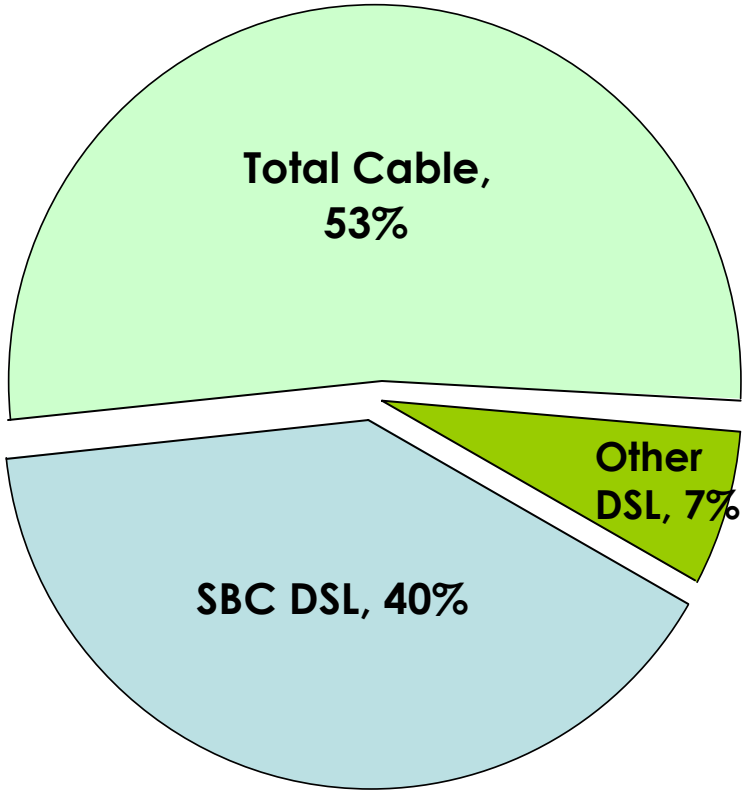
- Study results, which are depicted on the following four pages, are accurate to within 1.3% for Residential, and within 3.3% for business.

- Yankee Group confirms cable's provision of broadband to large numbers of both residential and business subscribers: "With over 7 million consumer and 500,000 business subscribers at the end of 2001, cable modem will easily maintain its leadership as the most important broadband connectivity technology in the United States." (2002 Broadband Subscriber Forecast, Yankee Group (August 2002))

Mass Market Broadband

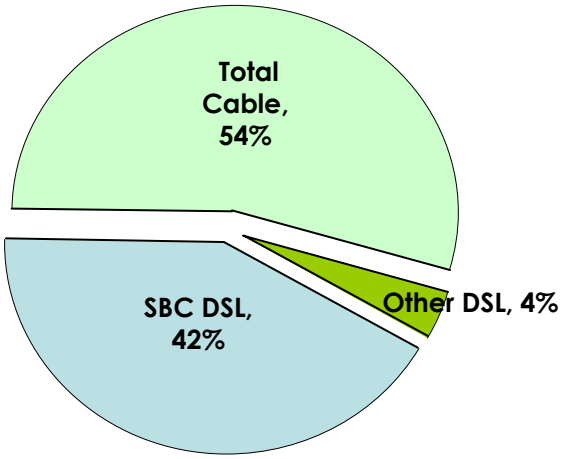
1Q03 Residential Broadband Market Share

(within SBC franchise area only)

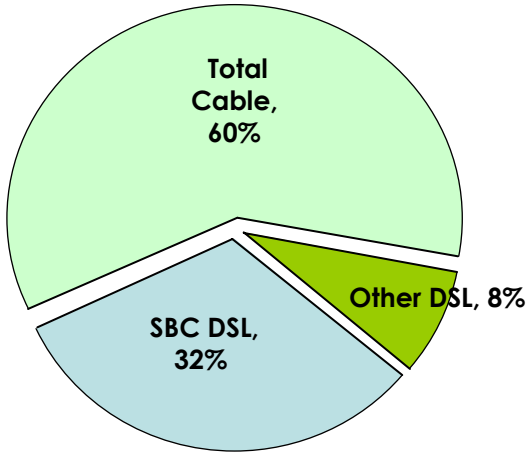


1Q03 Residential Broadband Market Share by Region *(within SBC franchise areas only)*

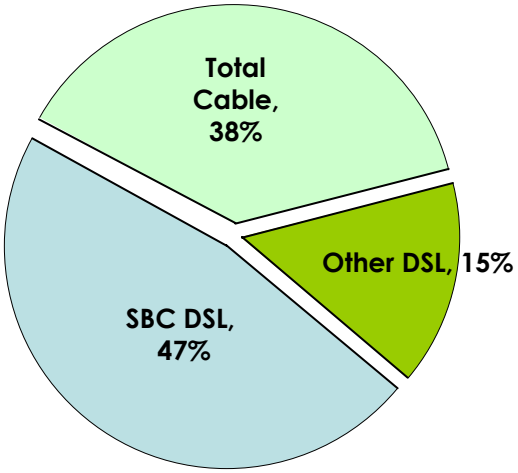
Southwest Broadband Market Share



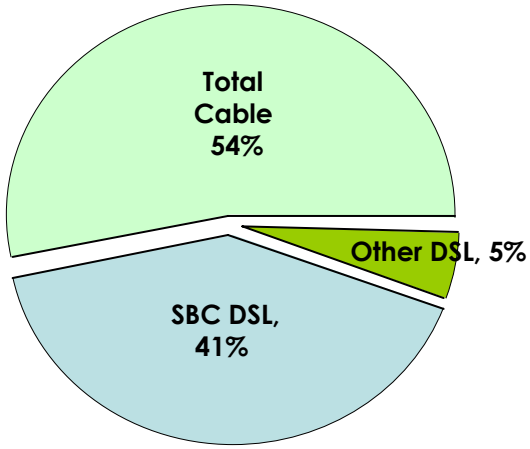
MidWest Broadband Market Share



West Broadband Market Share



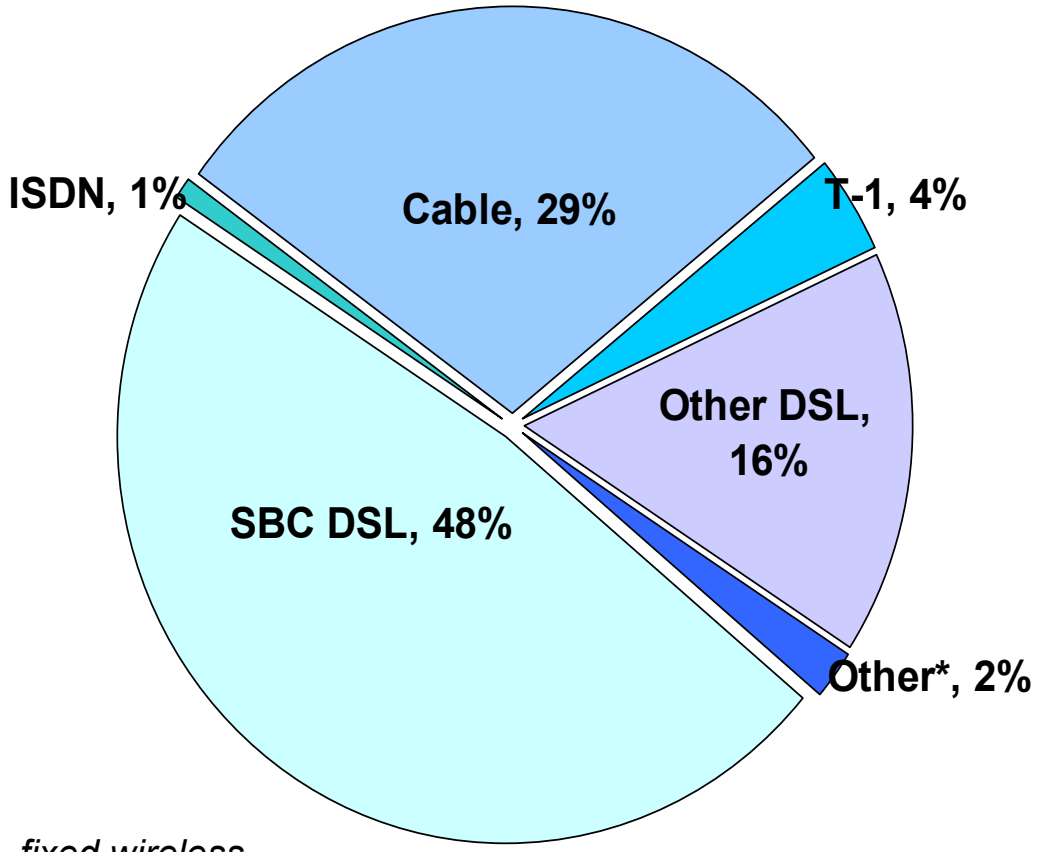
SNET Broadband Market Share



Mass Market Broadband

1Q03 Small Business Broadband Market Share

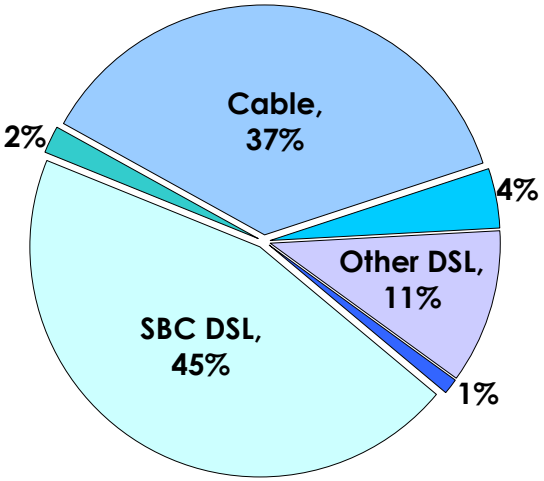
(within SBC franchise areas only)



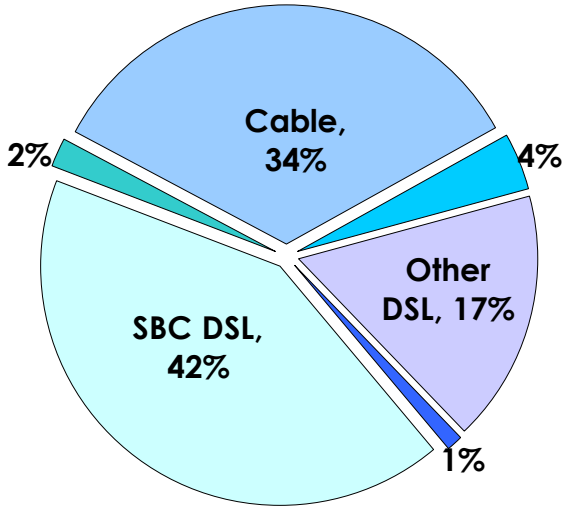
**Other = Satellite, fixed wireless*

1Q03 Small Business Broadband Market Share by Region *(within SBC franchise areas only)*

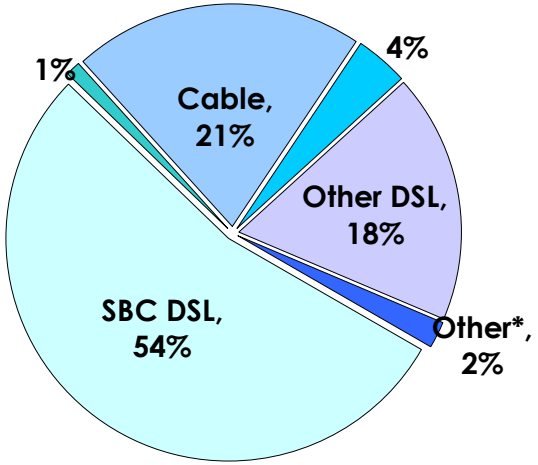
Southwest Broadband Market Share



Midwest Broadband Market Share



West Broadband Market Share



**Other = Satellite, fixed wireless*

Mass Market Broadband
Competitive Outlook

- The factors that have sustained Cable Modem's market leadership will continue to intensify for the foreseeable future:
  - Product – Most providers are aggressively expanding their product lines and introducing additional applications.
  - Price – The effective market price has decreased by 5-10% in the past six months and is expected to fall further through the remainder of this year.
  - Promotion – Most providers are poised to redouble their marketing and advertising expenditures in order to gain market share.
  - Placement – Most providers are aggressively expanding their footprint, trialing new retail channels, and developing innovative wholesale arrangements with ISP partners.
- Mass market broadband is – and will remain – a fully and fiercely competitive arena.